



## INTERNATIONAL SEARCH REPORT

 International application No.  
PCT/US00/40731

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G08G 1/01; G08C 19/00; B60Q 1/00

US CL : 340/933, 425.5, 439, 438, 10.1; 701/29; 235/384

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 340/933, 539, 425.5, 439, 438, 10.1, 825.06, 825.69, 825.72, 825.36, 825.49; 701/29, 30; 235/384; 455/73

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
NONEElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
APS VEHICLE AND DOWNLOAD AND MOBILE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,525,991 A (NAGURA ET AL) 11 JUNE 1996, cols. 5, 11-14, and figures 4-11.	1-13
X	US 5,008,661 A (RAJ) 16 APRIL 1991, COLS. 3 AND 4.	1-13
Y	US 4,912,471 A (TYBURSKI ET AL) 27 MARCH 1990, FIGURE 1, and abstract.	1-13
A	US 5,065,321 A (BEZOS ET AL) 12 NOVEMBER 1991, Abstract, figure 1.	1-13
Y	US 5,477,215 A (MANDELBAUM) 19 DECEMBER 1995, Figures 1, 2A, 2B, cols. 3-6	1-13
A	US 5,864,580 A (LOWE ET AL) 26 JANUARY 1999, ENTIRE DOCUMENT	1-13

☒ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*E* earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*G* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 09 JANUARY 2001	Date of mailing of the international search report 25 JAN 2001
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer DONNIE L. CROSLAND Telephone No. (703) 305-4388 <i>Karen A. Ward</i>

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	US 6,061,614 A (CARRENDER ET AL) 09 MAY 2000, ENTIRE DOCUMENT	1-13